

APPARATUS AND METHOD FOR MANIPULATING  
CORE BODY TEMPERATURE

ABSTRACT OF THE DISCLOSURE

5 The present invention provides a system for manipulating a core body  
temperature of a mammal. The system of the invention includes a chamber for  
enclosing a body portion of a mammal and a seal in operative association with the  
chamber for sealing the chamber around the body portion and for inhibiting movement  
of the body portion relative to the chamber when the system is in operation. A thermal  
energy exchange system in operative association with the chamber includes an energy  
10 element assembly coupled to a flexible membrane assembly. The flexible membrane  
assembly facilitates an exchange of energy between the energy element assembly and  
the body portion. A vacuum system is operatively associated with the chamber while  
the thermal energy exchange system is in operation. The vacuum system generates a  
sub-atmospheric pressure within the chamber.

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